

## Experiences with Spider Exhibitions in The Netherlands

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par  
**Peter Koomen**

**Summary:** During the past three years, four spider exhibitions for the general public were organized in The Netherlands. Most successful was the exhibition in the Museon, Den Haag (The Hague). It consisted of eleven panels giving basic information. In show-cases, several preserved specimens were displayed, together with photographs of the same spiders alive and their ways of catching prey. In vivaria some Dutch spiders, a bird-eating spider, a black widow, and a *Nephila*-spider were shown. Variation among spiders was demonstrated by slides, the building of orb-webs by computer graphics. Visitors could test their knowledge of spiders with the aid of a booklet and flip panels. The press was very much interested in this exhibition, leading to announcements in most of the Dutch newspapers and in radio and television programs. This resulted in about 30,000 visitors within two months. Most visitors appreciated the exhibition, but some were disappointed, for instance because of the limited amount of living tarantula's, or because their arachnophobia was not cured despite of promises in the press.

### 1. INTRODUCTION

**M**any people are afraid of spiders. But if these anxious people are asked to draw a spider, the results are usually disappointing (figure 1). The number of body tagmata, legs, eyes and mouthparts are most times not in conformity with reality. It can be concluded that people with fear of spiders, many times do not know what they are afraid of. Probably, we have to do with a very serious case of unknown, unloved. The case is so serious, because the unreasoned fear for spiders may have some major drawbacks on subjects concerning arachnology and arachnologists:

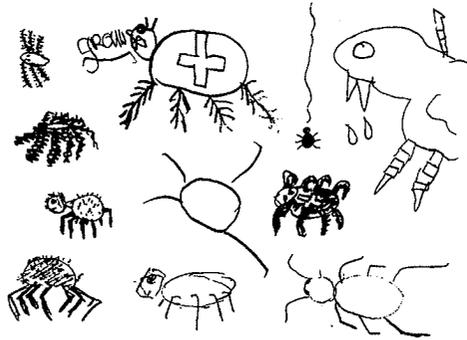


Fig. 1 - Some drawings of spiders, made by people afraid of spiders.

1. Spiders are very interesting animals, but few will ever know if people are afraid of them *beforehand*.
2. If spiders are not accepted as animals worth to be studied, how will arachnology ever be accepted, and arachnologists be employed as such?
3. Why should nature be protected, if it is full of terrifying animals like spiders?

So, there are several reasons to accept an invitation to make a spider exhibition. This was done four times (see figure 2 and table I): in Vianen, Haren, Den Haag (The Hague), and in Dokkum. Most successful was the exhibition in Den Haag in the Museon. This was formerly the Museum for Education (in Dutch: Museum voor het Onderwijs), that has developed now into a rather large popular science museum, with exhibits concentrating on five main areas: geology, natural history, history, science, and ethnology. Education is still very important in the Museon, and there are some classrooms for giving lessons and practice programs with schoolchildren and other visitors. In summer, some classrooms are used for additional exhibitions, for instance a spider exhibition in 1990. Information in this paper refers to the exhibition in the Museon, unless stated otherwise.

## 2. MATERIAL AND METHODS

**B**asic information was given by some panels with photographs and short texts. First, these panels were made as cardboard mock-up's, exhibited in a public library in Vianen, where reactions of visitors were observed. The final panels were made of chipboard, giving information about systematic position of spiders, outer and inner morphology, sense organs, sexual organs, courtship, parental care, mimicry, ballooning and the "usefulness" of spiders. Special care was taken to make it easy for the general public to remember the information well, by linking it up to familiar subjects. For instance, on the panel with information about sense organs (figure 3), comparison is made with sense organs of man.



Fig. 2 - Map of The Netherlands, showing locations of spider exhibitions.

Prey capture was displayed in show-cases by preserved spiders (showing the size of the spiders), together with photographs of the same spiders alive (showing colours), and photographs of their ways of catching prey. The building of orbwebs was demonstrated by computer graphics. In vivaria some Dutch spiders, caught by the author, were shown, like water spiders (*Argyroneta aquatica* (Clerck)), wolf spiders (*Pardosa amenata* (Clerck), *Pirata* sp.), daddy-long-legs spiders (*Pholcus phalangioides* (Fuesslin)), jumping spiders (*Salticus*

*scenicus* (Clerck)), house spiders (*Tegenaria atrica* C.L.Koch), and orbweb spiders (*Larinioides cornutus* (Clerck)). Prof.dr. T.E. Christenson (Tulane University, New Orleans) kindly provided some giant orbweb spiders (*Nephila clavipes* (Linnaeus)). Some tarantula's (*Euathlus smithi* (Cambridge), *Melopoeus minax* (Thorell)) and a black widow spider (*Latrodectus* sp.) were borrowed from a zoo.

Variation among spiders was demonstrated by slides, alternately showing a short word (green, spiny, round, etc.) and a spider with that property. Visitors could have a close look at a preserved spider by looking through a stereo-microscope. Meanwhile the spiders could be manipulated without causing damage with the aid of brushes. Some other microscopes showed urticating hairs of a bird-eating spider and preparations of sexual organs.

Finally visitors could test their knowledge with the aid of a booklet and flip panels (see MILES et al. 1988, fig. 9.12) showing various arthropods of which the spiders had to be recognized. Visitors could ask questions to a museum teacher, that was always present. Visitors were counted at the entrance of the Museon (Den Haag), the botanical gardens (Haren), and the nature museum (Dokkum), respectively. Thus, no distinction was made between people actually visiting the spider exhibition and people remaining in other parts of the institutions. Visitors of the test exhibition in the public library in

Vianen have not been counted. Reactions of visitors could only quantitatively be derived from the remarks written down (mainly by children) in the visitor's book. No inquiry was held.



Fig. 3 - Example of an information panel, showing sense organs of spiders compared with sense organs of man.

### 3. RESULTS AND DISCUSSION

#### 3.1 The press

Quite unexpectedly, the press was very much interested. For several days, two staff-members of the Museon and the author were occupied answering questions of journalists. This resulted in announcements and articles in, as far as traced, six national newspapers, forty-one local newspapers, one Belgian newspaper, and one popular science magazine for children. Moreover, staff members and the author were interviewed more extensively by two newspapers, a women's magazine, three local and two national radio stations. The author was invited to appear in two television programs: a talk show and the breakfast news.

Concerning the interests of the press, it was disappointing that most questions were about humans instead of spiders. It is recommendable to have a quick answer on questions like "Why are people afraid of spiders?" and "How many people die from spider bites?", so that more time is left for the spiders. Mistakes made by the press are sometimes amazing. Staff members of the Museon handed out photographs to the press, that showed a rather harmless bird-eating spider, as was written on the back of the photograph. At least 17 newspapers printed this photograph telling that it was a very dangerous black widow. This problem can be avoided by writing the text on the front of the photographs, or by providing photographs of black widows only.

### **3.2 The public**

Thanks to all the publicity, many people in The Netherlands decided to have a look at the exhibition. A total number of 34903 people visited the Museon during the spider exhibition (July and August 1990). Custodians declared that most of them came especially to see the spider exhibition. However, this was difficult to check, because an inquiry was not held. Only the number of visitors could be compared to the number of visitors in the same period in 1989 (see table I). At that time, there was a butterfly exhibition in the Museon. It can be concluded that spiders attracted 32% more visitors than butterflies, but this result may be biased by other temporary exhibitions, not concerning natural history subjects. Nevertheless, even more spectacular increases (89% and 659%, see table I) were recorded during two other exhibitions. Thus, it seems clear that spider exhibits are able to attract a lot of people.

But how pleased were all these people with the exhibition? Of the 868 remarks written down in the visitor's book, 439 (51%) were only positive, 279 (32%) contained positive as well as negative elements, and 120 (14%) were only negative. 30 reactions (3%) were not clear, because they did not refer to the exhibition or because they were written in a foreign language not understood by the author. The most numerous reactions are summarized in table II. It is good to see that many people found the exhibition interesting, informative, or beautiful in some way, and that microscopes, living spiders and a living teacher were appreciated. Unfortunately, only 33 persons wrote down that their fear for spiders had decreased. Probably, most of the negative reactions were evoked by the enormous publicity. This was also the feeling of the museum teachers. People expected a very big exhibition and were disappointed to see that it was only one classroom, with only a small amount of living tarantula's that were hiding, and might not be touched. Also, quite a lot of people complained that their arachnophobia was not cured despite of promises of the press.

**Tab. I** - Data concerning spider exhibitions organized by the author in The Netherlands. The numbers of visitors during the exhibitions are compared to the number of visitors during the same period in the year before without spider exhibition.

location	institution	period	year	number of visitors	increase
Vianen	public library	6-29 September	1989	not counted	not known
Haren	botanical gardens	13 May -11 June do. (no spider exh.)	1990	8376	89%
			1989	4430	
Den Haag	Museon do. (no spider exh.)	July & August	1990	34903	32%
			1989	26499	
Dokkum	nature museum	12 March - 31 May do. (no spider exh.)	1991	2650	659%
			1990	349	

**Tab. II** - Most numerous reactions written down in the visitor's book during the spider exhibition in the Museon.

Positive reactions	number of reactions	% of total nr.
interesting\fascinating	152	17.5%
informative	123	14.2%
beautiful (photographs/exhibit/spiders)	78	9.0%
appreciation for microscopes	37	4.3%
fear for spiders decreased	33	3.8%
appreciation for living spiders	19	2.2%
appreciation for presence teacher	15	1.7%

Negative reactions of total nr.	number	% of total nr. of reactions
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positive, but ...	203	23.4%
scaring	198	22.8%
exhibition is too small	92	10.6%
still afraid of spiders	45	5.2%
not enough living (bird eating) spiders	39	4.5%
not possible to touch spiders	16	1.8%
fear for spiders increased	14	1.6%

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#### 4. CONCLUSIONS

**A**lthough (or perhaps: because) many people are more or less afraid of spiders, these animals have the image of being "sensational". Even a rather small exhibition may cause, when the press gets interested, a chain reaction of publicity. This may result in more visitors than estimated, with high expectations. To meet (some of) these expectations, the exhibition has to be bigger than one classroom and should show a rather large amount of bird eating spiders. The question is, whether such a more spectacular exhibit will not undermine the goal each educational spider exhibition should have: to teach the public what spiders are, and what they are doing.

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**Peter KOOMEN**

Havikshorst 34, NL-2317 AL LEIDEN